

JAVA.UTIL.HASHSET CLASS

http://www.tutorialspoint.com/java/util/java_util_hashset.htm

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Introduction

The **java.util.HashSet** class implements the Set interface, backed by a hash table. Following are the important points about HashSet:

- This class makes no guarantees as to the iteration order of the set; in particular, it does not guarantee that the order will remain constant over time.
- This class permits the null element.

Class declaration

Following is the declaration for **java.util.HashSet** class:

```
public class HashSet<E>  
    extends AbstractSet<E>  
    implements Set<E>, Cloneable, Serializable
```

Parameters

Following is the parameter for **java.util.HashSet** class:

- **E** -- This is the type of elements maintained by this set.

Class constructors

S.N.	Constructor & Description
1	HashSet() This constructs a new, empty set; the backing HashMap instance has default initial capacity (16) and load factor (0.75).
2	HashSet(Collection<? extends E> c) This constructs a new set containing the elements in the specified collection.
3	HashSet(int initialCapacity) This constructs a new, empty set; the backing HashMap instance has the specified initial capacity and default load factor (0.75).
4	HashSet(int initialCapacity, float loadFactor) This constructs a new, empty set; the backing HashMap instance has the specified initial capacity and the specified load factor.

Class methods

S.N.	Method & Description

1	<u>boolean add(E e)</u> This method adds the specified element to this set if it is not already present.
2	<u>void clear()</u> This method removes all of the elements from this set.
3	<u>Object clone()</u> This method returns a shallow copy of this HashSet instance, the elements themselves are not cloned.
4	<u>boolean contains(Object o)</u> This method returns true if this set contains the specified element.
5	<u>boolean isEmpty()</u> This method returns true if this set contains no elements.
6	<u>Iterator<E> iterator()</u> This method returns an iterator over the elements in this set.
7	<u>boolean remove(Object o)</u> This method removes the specified element from this set if it is present.
8	<u>int size()</u> This method returns returns the number of elements in this set(its cardinality).

Methods inherited

This class inherits methods from the following classes:

- java.util.AbstractSet
- java.util.AbstractCollection
- java.util.Object
- java.util.Set